



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029

Exemption 6:
Personal privacy

Dear Exemption 6

Sorry for taking a while to get back with you about the health effects information you requested with respect to the low level of MTBE (0.6 micrograms/liter or parts per billion) detected in your private drinking water well.

The official EPA document is the Drinking Water Advisory of 20 to 40 ppb based on taste and odor studies. Please see the enclosed Fact Sheet (issued by EPA in December 1997) for the summary. The full Advisory report is available at:
<http://epa.gov/waterscience/criteria/drinking/mtbe.html>

Since 1997, EPA had conducted additional health effects research. It is expected that EPA will finalize its risk assessment around June 2007 after going through the review by external scientific experts, such as the National Academy of Sciences.

Many States have established various health-based standards for MTBE. Among them, California set the health-based drinking water standard at 13 parts per billion (ppb) in 1999. California is often considered as a bellwether state for drinking water standard. If you are interested, the technical documents supporting this standard can be downloaded at:
<http://www.oehha.ca.gov/water/phg/399mtbea.html>

Finally, enclosed for your comparison is a list of standards that have been established by various states. The primary (health based) drinking water standards range from 10 ppb to 240 ppb. The detection of 0.6 ppb in your drinking water is relatively low as compared with these standards.

Should you decide to pursue treatment, there are several organizations that can help you with the selection of a treatment unit, such as NSF International, Water Quality Association, and The Underwriters Laboratories, Inc. You can obtain their contact information from the EPA's website - "MTBE in Drinking Water." A copy of the web page is enclosed for your reference.



I hope the enclosed information will be useful to you. Please feel free to call me at (215) 814-5258 if you have further questions.

Sincerely,

A handwritten signature in cursive script that reads "Michelle Hoover".

Michelle Hoover
EPA Region III
Drinking Water Branch

Enclosures

10/26/2000

①

Exemption 6: Personal privacy

referred by Elaine Wright Supervisor at Doylestown
leakage, spillage into local residential wells
small carbon filter at home. ? is looking into open tray is tower
(afraid the pump ~~out to the~~ permeated the filter unit, can smell something)
8 homes - 6 individual residence

- 1 office building (Dentist office) - 1 story
- 1 motel strip (15-20 cabins) has done the
has ^{now} converted to

→ carbon filter w/ GAC → tank
3 carport foot ^{water} in parallel → 6 in total
is outdoors, may freeze.

lowest 75 ppb, highest 6800 ppb

Thinking about creating the MIBE fumes & get it out to the open & say
go ~~away~~ to roof (open tower & stripper aerator?)

\$14000 - \$5000 for the ^{air} stripping unit. \$900 for the carbon filter/
plus \$40/unit for ~~carbon~~ waste disposal of filter.

Rory Haight & ^{Thomas} Speck from Cincinnati ORD
recommend up to 300 ppb - 1000 ppb → GAC (granular activated carbon)
75 ppb → GAC is sufficient
→ Air Stripper ~~to~~ followed by GAC

It is impossible for MIBE to escape from the filtration unit if enclosed.

The odor from the effluent could be TBA, TBF (Breakdown of MIBE)

They have weak absorption to filter. Can use the odor as the
indicator to see if it is activated. & the GAC follows.

10/27/2000.

Exemption 6: Personal privacy

Lives in Bucks County

where to get his ^{private} well water tested?

his well is about 200 feet away from the Salbury Township fuel tank. He has some concerns.

Trees died in the yard & there is oil spit on top of the water if it sits for a while ^{glass of}

hasn't smell or taste something like solvent.

He has cancer

www.dep.state.pa.us/labs

Can select state, ~~PA~~ County & VOC1 (per DEP request)

MTBE	EPA 524.2	-	
	D 5790-95	- ASTM	
	SM 6210 D	> Std methods	List C
	SM 6200 B		
	SM 6200 C	>	List 2 Rule
	EPA 502.2		Added 2 more methods

[www.dep.state.pa.us/labs/deputate/mts/bol

{In Archive} Re: MtBE Contamination in Bucks County 
Michelle Hoover to: Roger Reinhart

10/19/2001 04:52 PM

From: Michelle Hoover/R3/USEPA/US
To: Roger Reinhart/R3/USEPA/US@EPA,
Archive: This message is being viewed in an archive.

Roger,

If you don't mind, I can go through the files to extract the information.

Michelle
Roger Reinhart

Roger Reinhart
10/19/2001 03:57 PM
To: Michelle Hoover/R3/USEPA/US@EPA
cc:
Subject: Re: MtBE Contamination in Bucks County

Michelle,

This is about the best I could do on such short notice; sorry. I have all the files in my office, if you or someone else needs to review in more detail. Let me know. I'll be out on Monday but back in office on Tuesday.

----- Forwarded by Roger Reinhart/R3/USEPA/US on 10/19/2001 03:55 PM -----

Michelle Hoover
10/19/2001 12:32 PM
To: Roger Reinhart/R3/USEPA/US@EPA
cc:
bcc:
Subject: Re: MtBE Contamination in Bucks County

Hi Roger,

Exemption 6: Personal privacy and thanks for the information. I have a few questions on the MTBE contamination site at Cross Keys and would appreciate your help. I am trying to build the events in chronological orders with more specific info. Some of our telephone conversation was captured for your confirmation. (If you prefer, you could insert your response right below the question by clicking the red ball pen icon on the panel.) I hope you are in today. Otherwise, if you could provide the information next Monday morning, that will be fine too.

Is the Cross Keys intersection in Doylestown, PA located near route 313 and 116? The Cross Keys intersection is located at route 313 (Swamp Road) and old route 611 (Easton Road).

Was the gasoline constituents first identified in on-site monitoring wells about three years ago in early 1999 by both companies? Is there a more specific date, such as month and year available? Both gasoline stations have had a history of leaking USTs. Based on reports in the EPA file, Mobil was monitoring its site as early as June 1989. Results indicated the presence of BTEX and MTBE (as high as 13,000 ug/l). Motiva (formerly Star Enterprise) started sampling as early as March 1992. Results indicated high levels of BTEX compounds. MTBE was not originally sampled for.

What were the actions taken by the gas station owner and PA DEP right after the discovery? Were PA DEP and township folks notified of the release immediately? Each of the facilities worked with PADEP in developing and implementing on-site remediation projects. Verify details with Lauren Mapleton and Barb Bloomfield (PADEP).

When was the case referred to EPA Region III by PA DEP? When were the emergency orders then issued by EPA Region III to Motiva and Mobile respectively? What does this Order specifically require the company to do? (such as requiring Motiva to track the movement of benzene and MTBE in the ground water and/or requiring Motiva and other responsible parties in the area to furnish an alternate water supply.)

(I understand from our telephone conversation that the order required one of the companies to continue to monitor up to 8 homes quarterly for BTEX and MTBE.) Were there any monitoring conducted prior to the quarterly monitoring to narrow down the 8 home? Lauren Mapleton (PADEP) originally referred to EPA a potential Underground Injection Control Issue at Martino's Muffler shop (next door to the Mobil facility) sometime in summer of 1995. EPA subsequently inspected the Martino facility and the Mobil gas station. Mobil thereafter copied EPA on monitoring reports which indicated free product (gasoline) found in a few of its monitoring wells. In an information request, Mobil indicated that there is a community of private wells users within 1/4 mile of the facility. In subsequent meetings with Mobil and PADEP, it was mutually decided that PADEP would continue to oversee the on-site clean up and EPA would pursue the potential endangerment to the private well users. About this time EPA began to investigate the Texaco gas station across the street. After several meetings and phone conferences, EPA issued emergency SDWA 1431 Orders to each of the oil companies. On 12/20/99, EPA issued a Consent Order to ExxonMobil for quarterly monitoring of BTEX and MtBE at eight residences which rely on private water supplies. The eight homes were selected due to their close proximity to the Mobil facility. On 5/5/00, EPA issued a unilateral Order to Motiva, requiring the company to conduct GW monitoring in the intermediate location between the facility and the community of private water supplies. To date none of the monitoring has indicated there is an immediate danger of BTEX or MtBE contamination at any of the private water wells.

Initially, how many private wells were sampled down gradient of each source and what were the results? How many homes were affected from each source? (I understand that there was no appreciable MTBE found in the drinking water samples. 1 ppb was found in one or two of the drinking water samples and most of the levels of MTBE found were less than 4 ppb.) Do you still have more specific levels from the sampling results? Since November 1997, there have been at least six rounds of sampling conducted at the community of private well users. In all about 12 different wells were tested at one time or another. Initial rounds of testing included a wide range of volatile organics. While no appreciable levels of BTEX and MtBE were identified, there were low levels of chlorinated solvents. These same contaminants were known to exist throughout the area; their source not known. More recently, Mobil's consultant has been conducting monitoring on about eight private wells for BTEX and MtBE only. No appreciable levels of BTEX and very low concentrations of MtBE were identified. (Only one well showed a concentration of 4.0 ppb). If you want to review the specific results please contact me.

What actions have been done to resolve this case? (I assume since there is no endangerment to the public health based on the sampling results, there was no need for the company or responsible parties to provide bottled water or carbon filtration to affected homes.) At this point the two companies continue to monitor the ground water. There appears to be no immediate risk of contamination from BTEX and MtBE. Reports are submitted quarterly.

(I understand that the Mobile station pumped the product (MTBE) off.) Any other remediation actions as required by PA DEP that you know about?

Have both stations ceased their operation and when? There had been on-going remediation at both facilities. PADEP can provide the specific details for each. At one time the Mobil facility had pumped free product (gasoline) from a few of its monitoring wells. It was not clear where the product came from (all USTs tested to be OK).

Do we consider this case closed on our part or PA DEP part?

EPA continues to review incoming monitoring reports to assure the safety of the private well users.
See PADEP for their current involvement.
THANKS.

Michelle
x4-5258

Roger Reinhart

Roger Reinhart
10/18/2001 09:32 AM

To: Michelle Hoover/R3/USEPA/US@EPA
cc:
Subject: MtBE Contamination in Bucks County

Michelle,

I follow-up to our conversation yesterday I have had the following involvement in the three UST/MtBE cases I am aware of in Bucks County, PA. Please call me if you have any questions or need more clarification.

Pools Corner - I contacted Lauren Mapleton (PaDEP) and Charles Kominas (ExxonMobil) to establish what actions each had taken. I was informed that the extent of the contamination had been adequately assessed and impacted water supplies were being addressed. The SDWA Branch is planning no additional action at this time.

Bedminster - I contacted Debra Fries (PaDEP) and conducted follow-up inspection of the facility. I learned that PaDEP was adequately addressing endangerment issue in contaminated water wells.

Cross Keys - SDWA Branch has been working with PaDEP for past several years concerning this site. Two gas stations owned by Mobil Oil and Motiva had known fuel releases from their respective USTs. EPA learned that there was a nearby community which relied on private water wells. PaDEP was actively addressing the on site cleanups at each of the facilities and agreed to defer to EPA on addressing the health endangerment from drinking water supplies. See the attached salient issues for more details on the emergency (Section 1431) Orders issued to ExxonMobil and Motiva.



Mobil.sal



Motiva.sal

—

Exemption 5: Deliberative process privilege

Exemption 5: Deliberative process privilege

{In Archive} Re: Congressional Response 

Michelle Hoover to: Jack Hwang

04/17/2001 04:36 PM

Archive: This message is being viewed in an archive.

Jack,

I revised the letter using redline and strickenout (attached file 1). If you wish, a clean version is provided (attached file 2) for your use. The list of public water systems looks good. I realigned the space a little bit. Please let me know if you have any questions on the revisions. I realized that some terminologies could be confusing, such as non-transient non-community water systems. But that is the official term we use in the drinking water program.

Thanks.

Michelle



R3-0100036C.wpd R3-0100036C clean.wpr R3-0100036C_A.wpd

Jack Hwang



Jack Hwang

04/17/2001 02:18 PM

To: Michelle Hoover/R3/USEPA/US@EPA

CC:

Subject: Congressional Response

Michelle,

Please review and provide comments. Thanks.



R3-0100036C.wpc R3-0100036C_A.wpr

Jack Hwang
US EPA Region III in Philadelphia
215-814-3387 (Phone); 215-814-3113 (Fax)
hwang.jack@epa.gov

Exemption 5: Deliberative process privilege

Exemption 5: Deliberative process privilege

Exemption 5: Deliberative process privilege

Exemption 5: Deliberative process privilege

Exemption 5: Deliberative process privilege



{In Archive} Congressional Response
Jack Hwang to: Michelle Hoover

04/17/2001 02:18 PM

Archive: This message is being viewed in an archive.

Michelle,

Please review and provide comments. Thanks.



R3-0100036C.wpc



R3-0100036C_A.wpc

Jack Hwang
US EPA Region III in Philadelphia
215-814-3387 (Phone); 215-814-3113 (Fax)
hwang.jack@epa.gov

Exemption 5: Deliberative process privilege

Exemption 5: Deliberative process privilege

Exemption 5: Deliberative process privilege

Issue pager
Exemption 5: Deliberative process privilege

Exemption 5: Deliberative process privilege

Exemption 5: Deliberative process privilege

Exemption 5: Deliberative process privilege

Exemption 5: Deliberative process privilege



{In Archive} RE: Reviewed Submission - MTBE Hearing
O'shell, Donald to: Michelle Hoover

11/02/2001 02:25 PM

From: "O'shell, Donald" <doshell@state.pa.us>
To: Michelle Hoover/R3/USEPA/US@EPA,
Archive: This message is being viewed in an archive.

Thanks - things seemed to go well although
Congressman Greenwood did put the
pressure on [Exemption 7(C)]. Please see article from
BNA.com. Talk to you
later.

Don

Air Pollution
Remedy for MTBE Contamination Needs
To Address Leaking Tanks, House Panel Told

Policymakers seeking to remedy the problem of
groundwater contamination from
the fuel additive MTBE should focus more on leaking
underground storage
tanks than the banning of the oxygenate, a House
panel was told Nov. 1.
The additive, methyl tertiary butyl ether, a
petroleum-derived oxygenate, is
used in reformulated gasoline, which is required by
the Clean Air Act to be
used in the summer months in the nine cities with the
worst ozone pollution.
The House Energy and Commerce Subcommittee on
Oversight and Investigations
heard testimony about the major air quality benefits
from gasoline
containing MTBE and the drawbacks because the
additive has been found in
groundwater supplies.

While studies have not shown MTBE to be particularly
toxic, its presence in
ground water produces a foul odor and taste.

MTBE supporters say policymakers should not phase out
the additive but
should look to the broader problem of storage tanks
that leak, causing the
ground water contamination.

"We don't want this stuff leaking into our waters,"
Tom Adams, president of
the Oxygenated Fuels Association, which represents
MTBE producers, told the
panel.

Moreover, he and others suggested, if MTBE is found
in the groundwater, that

could mean the leaking tanks are allowing other pollutants to contaminate the soil and water as well.

Lack of Resources

State environmental officials concede the problem of the leaking storage tanks but say they do not have the resources to deal with the problem and that part of the solution should be the phase-out of MTBE.

"We need to do this in a way that the air quality benefits realized by reformulated gasoline will not be lost and in a manner that will not significantly disrupt our nation's fuel supply or force Americans to pay exorbitant prices at the pump," Denise K. Chamberlain, deputy secretary for air, recycling and radiation protection in the Pennsylvania Department of Environmental Protection, said.

She supported legislation (H.R. 20) introduced by Rep. James Greenwood (R-Pa.), chairman of the subcommittee, that would allow states to waive the 2 percent oxygenate requirement, provide EPA more authority to control or prohibit MTBE or other oxygenates by allowing it to set a performance-based standard, and allow states to ban MTBE pending EPA approval.

EPA Developing Rule

Jeffrey Holmstead, assistant administrator for air at the Environmental Protection Agency, told the panel that the agency is about to conduct an interagency review of a draft proposed rule under the Toxic Substances Control Act that would address a possible reduction or phase-down of MTBE. The rule is not expected to be final for about five years, he said. Greenwood wanted to know if gasoline could be provided that would produce the same air quality benefits without MTBE.

Holmstead said that while air quality objectives could be met without MTBE, the Clean Air Act has a 2-percent oxygenate requirement. Refiners have said they could achieve the same air quality benefits without the 2-percent mandate, but Congress would have to change the law.

"One concern is whether the current performance standard captures all the benefit of oxygenates," Holmstead said.

Fear of Fuel Shortages

Some have suggested that a ban on MTBE would cause fuel shortages and price increases, especially in the summer months. Alternatives, including ethanol, an oxygenate produced from biomass such as corn, exist, but not in sufficient enough quantities to replace MTBE, Robert Kripowicz, acting assistant secretary for fossil energy at the Department of Energy, said.

Between 80 percent and 85 percent of the oxygenate used in reformulated gasoline is MTBE, Adams said.

Robert Dineen, president of the Renewable Fuels Association, an ethanol industry group, countered that ethanol could fill the void. About 2.5 billion gallons of ethanol would be needed to meet the oxygenate demand in the U.S. gasoline supply, he said. The current ethanol producing capacity is 2.3 billion gallons, but 13 plants are under construction. The California Energy Commission estimated that ethanol production would be in the 4 billion gallon range in the next few years.

However, environmental and public health advocates said phasing out MTBE would amount to an "ethanol mandate." Ethanol, they argued, has a higher volatility, producing increased evaporative emissions in the summertime, which can lead to higher ozone levels.

A Serious Problem

"The bottom line is the volatility effect of ethanol is a serious problem, so it shouldn't be mandated," A. Blakeman Early, a consultant testifying on behalf of the American Lung Association, told the panel. Some criticized Greenwood's bill because it does not contain anti-backsliding provisions, which would ensure that no air quality benefit is lost if MTBE is phased out.

Chamberlain and others testified that more federal help is needed to address

the problem of underground storage tanks.

Michael Ports, speaking on behalf of the National Association of Convenience Stores and the Society of Independent Gasoline Marketers of America, said Congress should authorize \$200 million for states to use to address "high priority releases" from underground tanks such as MTBE, allow money from the Leaking Underground Storage Tank Trust Fund to be used for UST enforcement, and authorize EPA to set up a database to track upgraded tanks and closed tanks.

By Susan Bruninga

Be Vigilant, Be Safe
Preventing and Responding to Emergencies
<http://www.dep.state.pa.us/dep/emergency/response/>

-----Original Message-----

From: Hoover.Michelle@epamail.epa.gov
[mailto:Hoover.Michelle@epamail.epa.gov]
Sent: Friday, November 02, 2001 12:53 PM
To: doshell@state.pa.us
Subject: Re: Reviewed Submission - MTBE Hearing

Don,

Thanks for the information. I accepted the edits from your regional offices and resubmitted the revised version to our HQs yesterday.

Michelle Hoover
EPA Region III
Drinking Water Branch
(215) 814-5258

"O'shell,

Donald"

Michelle
Hoover/R3/USEPA/US@EPA

<doshell@stat

e.pa.us>

To:

cc:

Subject:

Reviewed Submission -
MTBE Hearing

10/31/2001

12:19 PM

Michelle:

Some of our regional folks reviewed what you submitted to EPA central office. They made a "few" changes/suggestions. I am not sure if you would want to amend your version and resubmit it at this late date or not. But please be aware - FYI.

Don

<<EPA Testimony for Greenwood Hearing 10-31-01.rtf>>

Be Vigilant, Be Safe
Preventing and Responding to Emergencies
<http://www.dep.state.pa.us/dep/emergency/response/>

(See attached file: EPA Testimony for Greenwood Hearing 10-31-01.rtf)



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029

December 11, 2000

Exemption 6: Personal
privacy

Dear [Exemption 6]:

As you requested, enclosed is information on home drinking water treatment units, in particular, the air stripping unit for removing MTBE from the drinking water.

Enclosure 1 is published by the Pennsylvania Department of Environmental Protection. Please see page 25 (aeration) and page 29 (Appendix A) for the information.

Enclosure 2 is from the U.S. Environmental Protection Agency's Web site that provides general information on MTBE and its removal from the drinking water.

Enclosure 3 and 4 are two sources for home treatment unit information if you wish to pursue further in selecting a unit for your home.

Please feel free to call me at (215) 814-5258 if you have more questions or need additional information. I hope everything goes well with your newly purchased house.

Sincerely,

Michelle Hoover
EPA Region III
Drinking Water Branch

Enclosures

